

# EQUATIONS AND INEQUALITIES

## QUICK CHECK

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd \_\_\_\_\_

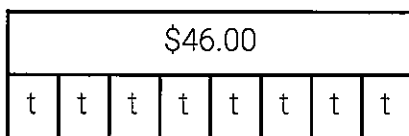
1. Ms. Sung budgets a maximum of \$320 per month for groceries. She grocery shops 4 times a month. Which inequality can be used to find the possible values of  $x$ , the amount she can spend at the grocery store during each shopping trip?

- A.  $4 + x < 320$       B.  $4x \leq 320$       C.  $4x \geq 320$       D.  $4 + x > 320$

2. If  $x = 5$ , then which inequality is true?

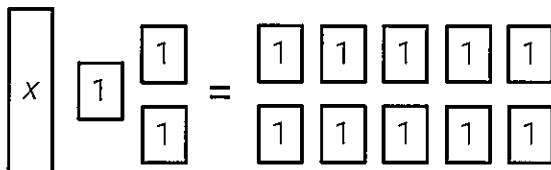
- F.  $2x \geq 12$       G.  $x - 2 < 7$       H.  $2x > 12$       J.  $x - 7 > 2$

3. The entrance fee to the children's museum was a total of \$46.00 for eight tickets. The model below shows the relationship. What was the entrance fee for one ticket?



- A. \$5.75      B. \$5.25      C. \$6.25      D. \$7.00

4. An equation is modeled below using algebra tiles. Which value of  $x$  makes the equation true?



- F.  $x = 7$       G.  $x = 13$   
 H.  $x = -7$       J.  $x = -13$

5. Margo must sell at least 38 tubs of cookie dough to support the student council fundraiser. She has already sold 19 tubs of cookie dough. Which inequality best represents the number of tubs of cookie dough Margo still needs to sell?

- A.  $x + 19 > 38$       B.  $x + 19 \leq 38$   
 C.  $x + 19 < 38$       D.  $x + 19 \geq 38$

1. (A) (B) (C) (D)

2. (F) (G) (H) (J)

3. (A) (B) (C) (D)

4. (F) (G) (H) (J)

5. (A) (B) (C) (D)

6. (F) (G) (H) (J)

7. (A) (B) (C) (D)

8. (F) (G) (H) (J)

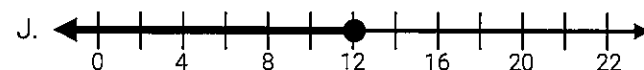
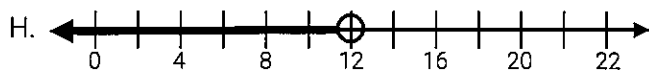
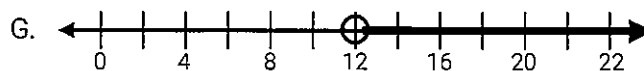
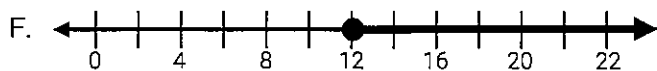
9. (A) (B) (C) (D)

10. Use the grid below.

					.		
+	0	0	0	0		0	0
-	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9

6. An elevator has a maximum weight of 300 pounds. Each pallet of boxes weighs 25 pounds. Which of the following number lines best represents the solution to the inequality?

$$25x \leq 300$$

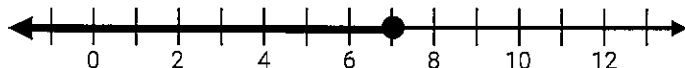


7. Which situation best represents the equation below?

$$x - 15 = 60$$

- A. Sandy collects sea shells. She had 60 shells, but then she gave away 15 shells. How many shells does Sandy have in her collection?
- B. Mr. Yung is 15 years younger than his brother. His brother is 60 years old. How old is Mr. Yung?
- C. The school band is selling raffle tickets. They have already sold 15 tickets and have 60 remaining with how many raffle tickets did they begin?
- D. Daniella measures a 15 inch length of rope and attaches it to another length of rope. Together the two ropes are 60 inches in length. How long was the piece of rope that Daniella attached?

8. The number line below represents the solution to which inequality?



F.  $x + 8 \geq 15$

G.  $x + 8 \leq 15$

H.  $x - 8 \leq 15$

J.  $x - 8 \geq 15$

9. Two piggy banks have a sum of \$36.50. The first piggy bank has \$13.75. How much does the second piggy bank have in it?

- A. \$22.75
- B. \$50.25
- C. \$2.65
- D. \$501.88

10. What is the value of  $x$  in this equation?

$$8x = 66$$

Use the bubbles in the answer section to mark your answer.